



## INTEROFFICE MEMORANDUM

**Date:** June 17, 2004

**To:** B. T. Richards MS 3921 6-5060

**From:** D. T. Peterson / R. R. Honsinger MS 3655 6-3984

**Subject:** CPP-603 EE/CA ALTERNATIVES

Estimating Services has prepared the attached Planning/ROM Cost Estimate for CPP-603 EE/CA Alternatives. Options 1 through 5 were estimated in previous estimates. This estimate is for scope revisions to Options 2 through 5.

- Option 2. Sludge and miscellaneous debris remain in basins. Basin waters are pumped to the ICDF as basins are filled with concrete grout, an engineered cap is constructed, and long term monitoring is performed for 20 years. Total estimated cost for Option 2 is \$5,214,000.
- Option 3. Basin sludge is removed. Basin debris would be left in place. Basin waters are pumped to the ICDF as basins are filled with concrete grout, an earth cap is constructed, and long term monitoring is performed for 20 years. Total estimated cost for Option 3 is \$4,774,000.
- Option 4. Basin sludge and debris are removed. Basin waters are pumped to the ICDF as basins are filled with concrete grout, an earth cap is constructed, and long term monitoring is performed for 20 years. Total estimated cost for Option 4 is \$5,995,000.
- Option 5. Basin sludge and debris are removed. Underwater divers would clean and apply fixative to basin walls and floor. Basin waters are pumped to the ICDF. Radiation shielding and containment barrier are constructed over the basin until the D&D of the CPP-603 complex is complete. Basins will be filled with sand or gravel and long term monitoring is conducted. Total estimated cost for Option 5 is \$7,118,000.

These estimates are based on previous estimates that were developed to support this project, vendor quotes, input from subject matter experts currently working on this project, and assumptions as outlined on the attached Cost Estimate Support Data Recapitulation sheets. Any changes to the methodology used to prepare this could have a significant effect on the cost estimate and should be reviewed for impacts to the TEC.

This project is assumed to be owned by the ICP. The estimated costs do not include provisions for the ICP Allocation Account for the years beyond 2004.

**Due to minimal detail and scope definition, this estimate should not be used to establish a cost baseline. The intent of the estimate is for planning purposes only.**

If you have any questions or comments, please do not hesitate to contact me at 526-3984 or Lotus Notes - ID HONSRR.

HONSRR

### Attachments

cc: Estimate File 2731-B  
R. R. Honsinger File (RRH-11-04)

Uniform File Code: 8000

Disposition Authority: A16-1.5-b

Retention Schedule: Cut off at the end of each fiscal year. Destroy 15 years after cutoff.

NOTE: Original disposition authority, retention schedule, and Uniform Filing Code applied by the sender may not be appropriate for all recipients. Make adjustments as needed.

## **COST ESTIMATE SUPPORT DATA RECAPITULATION**

Project Title: CPP-603 EE/CA Alternatives  
Estimator: D. T. Peterson / R. R. Honsinger  
Date: June 17, 2004  
Estimate Type: Comparative Analysis  
File: 2731-B  
Approved By:

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- I. **PURPOSE:** *Brief description of the intent of how the estimate is to be used, i.e., for engineering study, comparative analysis, DWP, LCB out-year planning, BCP, etc.*

This Comparative Analysis provides the reader with ROM values respective to the level of project development. The initiation phase, due to limited resource investment, is not intended to be the foundation by which baselines are established. Baselines will be established during the definition (conceptual design) phase. Understandably, technical requirements and associated costs could increase or decrease as additional data is acquired during the more comprehensive definition phase.

- II. **SCOPE OF WORK:** *Brief statement of the project's objective. Thorough overview and description of the proposed project. Identify work to be accomplished, as well as any specific work to be excluded.*

This analysis addresses the resources required to deactivate the CPP-603 basins. Please refer to the cost estimate summary and detail sheets for activities included in the analysis. Four options have been estimated for the deactivation of the basins, which include the following scenarios:

- Option 2. Basin water would be pumped/piped to the ICDF evaporation ponds. Sludge and debris would be left in the basins. As basin water is removed, concrete grout would be placed in the basins to encapsulate sludge, debris, and contamination left on the basin walls and floor. An engineered cap would be constructed on the existing basins. Four monitoring wells would be installed for long term monitoring.
- Option 3. This option reflects the costs to remove basin sludge. Basin debris would be left in place. Basin water would be pumped/piped to the ICDF evaporation ponds. As basin water is removed, concrete grout would be placed in the basins to encapsulate debris and contamination left on the basin walls and floor. An earth cap would be installed over the basins. Long term monitoring and maintenance would be required to ensure encapsulated contaminants remain in a stable condition.

## COST ESTIMATE SUPPORT DATA RECAPITULATION

- Continued -

Project Title: CPP-603 EE/CA Alternatives  
File: 2731-B

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- Option 4. Sludge and debris would be removed from the basins. Basin water would be pumped/piped to the ICDF evaporation ponds. As basin water is removed, concrete grout would be placed in the basins to encapsulate contamination left on the basin walls and floor. An earth cap would be installed over the basins. Long term monitoring and maintenance would be required to ensure encapsulated contaminants remain in a stable condition.
- Option 5. Sludge and debris would be removed from basins. Underwater divers would clean and apply fixative to basin walls and floors. Basin water would be pumped/piped to the ICDF evaporation ponds for final disposal. Radiation shielding would be installed around perimeter of basin wall. A containment barrier would be constructed over the basins to contain airborne contamination. The basins will be filled with gravel or sand. Long term monitoring and maintenance (20 years) would be conducted to ensure contaminants remain encapsulated.

III. **BASIS OF THE ESTIMATE:** *Overall methodology and rationale of how the estimate was developed. Source documents to include drawings, design reports, engineers' notes and/or other documentation upon which the estimate is originated. Overall explanation of sources for resource pricing.*

### **Option 2.**

- A. Cost used to remove the basin water was based on Estimate File No. 8530 DWP2-007A. This estimate was completed in FY 2000, and costs have been escalated at an average rate of 3% per year to 2004 dollars.
- B. Basin grouting costs are based on Estimate File No. 2361-D, CPP-603 Basin Deactivation, August 15, 2003. Costs are represented in FY 2004 dollars.
- C. Engineered basin cap is based on information published in the Conceptual Cover Design for RCRA Closure of the ICPP Waste Calcine Facility.
- D. Monitoring well costs based on information provided by BBWI Surveillance, Monitoring, and Long Term Ops personnel.
- E. Costs for project management and support are based on estimated project duration of one year.
- F. Costs for operation and maintenance are based on estimated activities and surveillance costs for 20 years.

### **Option 3.**

- A. Costs to remove, solidify and on-Site disposal of sludge are based on vendors quote (Duratek). (March 24, 2004)
- B. Cost used to remove the basin water was based on Estimate File No. 8530 DWP2-007A. This estimate was completed in FY 2000, and costs have been escalated at an average rate of 3% per year to 2004 dollars.

**COST ESTIMATE SUPPORT DATA RECAPITULATION**

- Continued -

Project Title: CPP-603 EE/CA Alternatives

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- C. Basin grouting costs are based on estimate File No. 2361-D, CPP-603 Basin Deactivation, August 15, 2003. Costs are represented in FY 2004 dollars.
- D. Earth cap is based on information published in the Conceptual Cover Design for RCRA Closure of the ICPP Waste Calcine Facility.
- E. Costs for project management and support are based on estimated project duration of one year.
- F. Costs for surveillance and maintenance are based on estimated activities and surveillance costs for 20 years.

**Option 4.**

- A. Costs to remove, solidify and on-Site disposal of sludge are based on vendors quote (Duratek). (March 24, 2004).
- B. Costs to remove basin debris are based on detailed estimate and assumptions and are addressed on the detailed item report. The actual costs for debris removal in the MTR canal were used as a basis for the debris removal in the South Basin of CPP-603.
- C. Cost used to remove the basin water was based on Estimate File No. 8530 DWP2-007A. This estimate was completed in FY 2000, and costs have been escalated at an average rate of 3% per year to 2004 dollars.
- D. Basin grouting costs are based on estimate File No. 2361-D, CPP-603 Basin Deactivation, August 15, 2003. Costs are represented in FY 2004 dollars.
- E. Earth cap is based on information published in the Conceptual Cover Design for RCRA Closure of the ICPP Waste Calcine Facility.
- F. Costs for project management and support are based on estimated project duration of one year.
- G. Costs for surveillance and maintenance are based on estimated activities and surveillance costs for 20 years.
- H. Grouting costs are based on Estimate File No. 2361-D. Costs are represented in FY 2004 dollars, and have been escalated to the mid point of the evaporation process.
- I. Project management costs are based on a part time effort to support the grout placement during the water evaporation process.
- J. Costs for operation and maintenance are based on estimated activities and surveillance costs for 20 years.

**Option 5.**

- A. Costs to remove, solidify and on-Site disposal of sludge are based on vendors quote (Duratek). (March 24, 2004)
- B. Costs to remove basin debris are based on detailed estimate and assumption and addressed on the detailed item report.

## COST ESTIMATE SUPPORT DATA RECAPITULATION

- Continued -

Project Title: CPP-603 EE/CA Alternatives

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- C. Cost used to remove the basin water was based on Estimate File No. 8530 DWP2-007A. This estimate was completed in FY 2000, and costs have been escalated at an average rate of 3% per year to 2004 dollars.
- D. Underwater cleaning and fixative costs are based on vendor quote. See project file for details.
- E. Shielding costs are based on input from G. E. Tomlinson.
- F. Cost for the basin cover is based on detailed estimate and assumption and addressed on the detailed item report.
- G. Earth cap is based on information published in the Conceptual Cover Design for RCRA Closure of the ICPP Waste Calcine Facility.
- H. Costs for project management and support are based on an estimated project duration of one year.
- I. Costs for operation and maintenance are based on estimated activities and surveillance costs for 20 years.

IV. **ASSUMPTIONS:** *Condition statements accepted or supposed true without proof of demonstration; statements adding clarification to scope. An assumption has a direct impact on total estimated cost.*

### **Option 2.**

A pipeline would be constructed between CPP-603 and the ICDF evaporation ponds. Basin water would be pumped to the ICDF. Sludge and debris would remain in the basins. It was assumed the sludge and miscellaneous debris would remain in their current state and be entombed with concrete grout. The engineered cap that will be contracted over the basins will be similar in design as the one designed in Conceptual Cover Design for RCRA Closure of the ICPP Waste Calcine Facility. Four monitoring wells will be installed and surveillance and monitoring of the wells and cap will continue for 20 years.

### **Option 3.**

A subcontractor would treat, stabilize, and ship sludge to an on-Site disposal area. Basin water will be piped to the ICDF evaporation ponds for disposal. It was assumed no costs would be charged to the project for the disposal of this water. The earth cap that will be contracted over the basins will be similar in design to the one included in the Conceptual Cover Design for RCRA Closure of the ICPP Waste Calcine Facility. Minimal long term monitoring and maintenance would be required to ensure encapsulated contaminants remain in a stable condition. Project management and support efforts were assumed to be a full-time effort during the construction phase of this project.

## COST ESTIMATE SUPPORT DATA RECAPITULATION

- Continued -

Project Title: CPP-603 EE/CA Alternatives

File: 2731-B

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### **Option 4.**

Sludge and debris will be removed from the basins and disposed of at an on-Site location. Basin water will piped to the ICDF evaporation ponds for disposal. Soils used to construct the low permeability soil layer of the earth cap will be imported from an off-Site source. Soil used to construct the vegetated soil layer will be imported from an on-Site source at no cost to the project. Long term monitoring and maintenance would be required to ensure contamination levels remain in a stable condition.

### **Option 5.**

Sludge and debris will be removed from the basins and disposed of at an on-Site location. Basin water will piped to the ICDF evaporation ponds for disposal. The radiation shielding was assumed to be ½" carbon steel sheets installed around the perimeter of the basins. The contamination containment will be constructed on plastic sheeting installed over structural framing. Underwater divers will clean and apply a fixative to basin walls and floors. The basins will be filled with gravel that will be imported from an on-Site source. At the end of the surveillance and monitoring operations, an earth cap will be constructed on the basins.

V. **CONTINGENCY GUIDELINE IMPLEMENTATION:** *Explanation of methodology used in determining overall contingency. Identify any specific drivers or items of concern.*

This analysis is being presented for comparisons only and does not include any contingency.

VI. **ESTIMATE SUMMARY:** *Total dollars/hours and Rough Order Magnitude (ROM) allocations of the methodologies used to develop the cost estimate.*

The estimate summary table is not applicable to the EECA alternative planning estimates because the estimates do not represent total project costs.

**COST ESTIMATE SUPPORT DATA RECAPITULATION**

- Continued -

Project Title: CPP-603 EE/CA Alternatives  
File: 2731-B

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<b>Cost Elements</b>		<b>Estimate</b>
Labor (BBWI)	\$	
Hours (BBWI)	Hrs	
Material (BBWI)	\$	
ODC (Other Direct Costs)	\$	
Contingency	\$	
<b>Total Cost</b>	<b>\$</b>	<b>NA</b>

<b>Estimate Methodology</b>	<b>ROM Percentage %</b>	
SME (Unrecorded Observations)		%
Recorded Actuals	0	
Parametric	0	
Vendor Quotes		
Other		
<b>Total</b>	<b>NA</b>	<b>%</b>

**VII. OTHER COMMENTS/CONCERNS SPECIFIC TO THE ESTIMATE:**

- A. These analyses do not represent total project costs. Engineering, project preparation, safety and health documents, etc., are not included. These costs were assumed to be relatively equal for the four alternatives. These analyses are presented for comparison purposes only, and are intended only to establish a path forward for the referenced project.**
- B. Due to percentage rounding, the Success reports will not reflect the exact dollars as shown in the detail reports.**
- C. The estimated costs do not include provisions for the ICP Allocation.**

## Project Summary Report

Project Name: **CPP-603 EE/ICA Alternatives**  
 Options 2, 3, 4, 5  
 Project Location: **INEEL / INTEC**  
 Estimate Number: **2731-B**

Client: **B. T. Richards**  
 Prepared By: **D. T. Peterson / R. R. Honsinger**  
 Estimate Type: **Planning/ROM**

Level	Group	Description	Estimate Subtotal	Escalation	Contingency	Contingency %	TOTAL
1.2	1.1.4	OPTION 2	\$4,607,952	\$658,641	\$0	0.00%	\$5,266,594
1.2.1		--Basin Water Removal To ICDF Evaporation Pond	\$486,892	\$22,640	\$0	0.00%	\$509,532
1.2.2		--Basin Grouting With Rapid Water Removal & Inplace Sludge & Debris	\$585,398	\$27,221	\$0	0.00%	\$612,619
1.2.2.1		----Basin grouting Winplace Sludge & Debris	\$585,398	\$27,221	\$0	0.00%	\$612,619
1.2.3		--Engineered Basin Cap	\$903,508	\$42,013	\$0	0.00%	\$945,522
1.2.3.1		----Purchase & Haul Low - Permeability Soil Layer	\$404,221	\$18,796	\$0	0.00%	\$423,017
1.2.3.2		----Vegetated Soil Layer	\$147,885	\$6,877	\$0	0.00%	\$154,761
1.2.3.3		----Filter Fabric, Sand Drainage Layer & Flexible Membrane Liner	\$317,674	\$14,772	\$0	0.00%	\$332,446
1.2.3.4		----Engineering	\$33,729	\$1,568	\$0	0.00%	\$35,297
1.2.4		--Monitoring Wells	\$600,000	\$27,900	\$0	0.00%	\$627,900
1.2.5		--Project Management & Support	\$481,659	\$22,397	\$0	0.00%	\$504,057
1.2.6		--S&M Costs	\$1,550,494	\$516,470	\$0	0.00%	\$2,066,964
1.3		OPTION 3	\$4,406,900	\$420,013	\$0	0.00%	\$4,826,912
1.3.1		--Sludge Removal	\$1,550,350	\$72,091	\$0	0.00%	\$1,622,441
1.3.1.1		----Sludge Removal	\$1,550,350	\$72,091	\$0	0.00%	\$1,622,441
1.3.2		--Basin Water Removal To ICDF Evaporation Pond	\$486,892	\$22,640	\$0	0.00%	\$509,532
1.3.3		--Basin Grouting With Rapid Water Removal	\$585,398	\$27,221	\$0	0.00%	\$612,619
1.3.4		--Earth Cap Over Building Foot Print	\$552,106	\$25,673	\$0	0.00%	\$577,779
1.3.4.1		----Purchase & Haul Low - Permeability Soil Layer	\$404,221	\$18,796	\$0	0.00%	\$423,017
1.3.4.2		----Vegetated Soil Layer	\$147,885	\$6,877	\$0	0.00%	\$154,761
1.3.5		--Project Management & Support	\$481,659	\$22,397	\$0	0.00%	\$504,057

**INEEL**



# Project Summary Report

Project Name: CPP-603 EE/ICA Alternatives  
Options 2, 3, 4, 5  
Project Location: INEEL / INTEC  
Estimate Number: 2731-B

Client: B. T. Richards  
Prepared By: D. T. Peterson / R. R. Honsinger  
Estimate Type: Planning/ROM

Level	Group	Description	Estimate Subtotal	Escalation	Contingency	Contingency %	TOTAL
1.3.6		--S&M Costs	\$750,494	\$249,990	\$0	0.00%	\$1,000,484
1.4		OPTION 4	\$5,572,460	\$474,211	\$0	0.00%	\$6,046,671
1.4.1		--Sludge Removal	\$1,550,350	\$72,091	\$0	0.00%	\$1,622,441
1.4.2		--Debris Removal	\$930,678	\$43,277	\$0	0.00%	\$973,954
1.4.2.1		----North Basin - Debris Removal	\$97,680	\$4,542	\$0	0.00%	\$102,222
1.4.2.2		----Middle Basin - Debris Removal	\$81,180	\$3,775	\$0	0.00%	\$84,955
1.4.2.3		----South Basin - Debris Removal	\$557,638	\$25,930	\$0	0.00%	\$583,568
1.4.2.4		----Canal - Debris Removal	\$105,360	\$4,899	\$0	0.00%	\$110,259
1.4.2.5		----Engineering and Remote Tool Development	\$88,820	\$4,130	\$0	0.00%	\$92,950
1.4.3		--Basin Water Removal To ICDF Evaporation Pond	\$486,892	\$22,640	\$0	0.00%	\$509,532
1.4.4		--Basin Grouting With Rapid Water Removal	\$585,398	\$27,221	\$0	0.00%	\$612,619
1.4.5		--Earth Cap Over Building Foot Print	\$552,106	\$25,673	\$0	0.00%	\$577,779
1.4.5.1		----Purchase & Haul Low - Permeability Soil Layer	\$404,221	\$18,796	\$0	0.00%	\$423,017
1.4.5.2		----Vegetated Soil Layer	\$147,885	\$6,877	\$0	0.00%	\$154,761
1.4.6		--Project Management & Support	\$716,542	\$33,319	\$0	0.00%	\$749,861
1.4.7		--S&M Costs	\$750,494	\$249,990	\$0	0.00%	\$1,000,484
1.5		OPTION 5	\$6,141,564	\$1,029,278	\$0	0.00%	\$7,170,842
1.5.1		--Basin Water Removal To ICDF Evaporation Pond	\$486,892	\$22,640	\$0	0.00%	\$509,532
1.5.2		--Sludge Removal	\$1,550,350	\$72,091	\$0	0.00%	\$1,622,441
1.5.3		--Debris Removal	\$930,678	\$43,277	\$0	0.00%	\$973,954
1.5.3.1		----North Basin - Debris Removal	\$97,680	\$4,542	\$0	0.00%	\$102,222
1.5.3.2		----Middle Basin - Debris Removal	\$81,180	\$3,775	\$0	0.00%	\$84,955
1.5.3.3		----South Basin - Debris Removal	\$557,638	\$25,930	\$0	0.00%	\$583,568

INEEL

# Project Summary Report

Project Name: CPP-603 EE/CA Alternatives  
Options 2, 3, 4, 5  
Project Location: INEEL / INTEC  
Estimate Number: 2731-B

Client: B. T. Richards  
Prepared By: D. T. Peterson / R. R. Honsinger  
Estimate Type: Planning/ROM

Level	Group	Description	Estimate Subtotal	Escalation	Contingency	Contingency %	TOTAL
1.5.3.4		---Canal - Debris Removal	\$105,360	\$4,899	\$0	0.00%	\$110,259
1.5.3.6		---Engineering and Remote Tool Development	\$88,820	\$4,130	\$0	0.00%	\$92,950
1.5.4		--Basin Containment For Air Borne Contamination	\$626,628	\$29,138	\$0	0.00%	\$655,766
1.5.4.1		---Basin Cover Engineering & Design	\$68,228	\$3,173	\$0	0.00%	\$71,400
1.5.4.2		---Basin Cover Construction	\$460,793	\$21,427	\$0	0.00%	\$482,220
1.5.4.3		---Radiation Shielding	\$97,607	\$4,539	\$0	0.00%	\$102,146
1.5.5		--Basin Decontamination / Stabilization	\$448,365	\$20,849	\$0	0.00%	\$469,214
1.5.6		--Project Management & Support	\$481,659	\$22,397	\$0	0.00%	\$504,057
1.5.7		--S&M Costs	\$831,494	\$276,971	\$0	0.00%	\$1,108,465
1.5.8		--Earth Cap Over Building Foot Print	\$552,106	\$380,898	\$0	0.00%	\$933,004
1.5.8.1		---Purchase & Haul Low - Permeability Soil Layer	\$404,221	\$278,872	\$0	0.00%	\$683,093
1.5.8.2		---Vegetated Soil Layer	\$147,885	\$102,026	\$0	0.00%	\$249,910
1.5.9		--Remove & Dispose of Basin Cover & Shielding & Basin Fill	\$233,392	\$161,017	\$0	0.00%	\$394,408
1.5.9.1		---Remove & Dispose of Basin Cover & Shielding	\$96,215	\$66,379	\$0	0.00%	\$162,594
1.5.9.2		---Basin Fill	\$137,176	\$94,638	\$0	0.00%	\$231,814

Total CPP-603 EE/CA ALTERNATIVES

\$20,728,876 \$2,582,143 \$0 0.00% \$23,311,019

INEEL

Project Name: CPP-603 EE/ICA Alternatives  
Options 2, 3, 4, 5  
Project Location: INEEL / INTEC  
Estimate Number: 2731-B

### Detail Item Report

Client: B. T. Richards  
Prepared By: D. T. Peterson / R. R. Honsinger  
Estimate Type: Planning/ROM

#	Code	Description	Contractor	Resource	Qty	UOM	Labor Hours	Labor Hourly Rate Cost	Equip Hours	Equipment Hourly Rate Cost	Material Unit Cost Cost	Subcontract Unit Cost Cost	Other % Cost	TOTAL COST
1		CPP-603 EE/ICA ALTERNATIVES					115,958	\$6,084,668	1,250	\$418,944	\$1,748,757	\$5,780,415	\$6,696,092	\$20,728,876
2	1.1.4	OPTION 2					27,013	\$1,129,966		\$122,873	\$356,576	\$600,000	\$2,398,536	\$4,607,952
3		Basin Water Removal To ICDF Evaporation Pond					0	\$0		\$0	\$0	\$0	\$486,892	\$486,892

1.00 ICP  
Design & construct pipe line, includes pump costs for 2 months  
Memo: Cost are based on Estimate File No. 8530 DWP2-007A. This estimate was completed in FY 2000, and costs have been escalated at an average rate of 3% per year to 2004 dollars. It was assumed no ICDF costs would be charged to the project. FY 2000 \$432,597.

Basin Grouting With Rapid Water Removal & Inplace Sludge & Debris  
Basis of Estimate: Estimate is based on Estimate File No. 2361-D cost are represented in FY-04 dollars.  
Basin grouting W/inplace Sludge & Debris

1.00 ICP  
Concrete Placement

Engineered Basin Cap  
Purchase & Haul Low - Permeability Soil Layer

1.00 DIRT  
Purchase Low Permeability Soil  
Memo: Assume soil will be imported from an off-Site source.

1.00 DIRT  
Operator & Loader

1.00 DIRT  
Teamster & Belly Dump  
Memo: Assume 4 Hr. for round trip with 20 cubic yard belly dump.

INEEL

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Estimating Services Department

Material Costs where applicable include Idaho State Sales Tax  
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# Detail Item Report

Project Name: CPP-603 EEICA Alternatives  
Options 2, 3, 4, 5  
Project Location: INEEL / INTEC  
Estimate Number: 2731-B

Client: B. T. Richards  
Prepared By: D. T. Peterson / R. R. Honsinger  
Estimate Type: Planning/ROM

#	Code	Description	Contractor	Resource	Qty	UOM	Labor Hours	Labor Hourly Rate	Equip Hours	Equipment Hourly Rate	Material Unit Cost	Subcontract Unit Cost	Other % Cost	TOTAL COST
14		1.00 DIRT		CN-EQMD	6,774.00	CY	41	\$36.78 \$1,495		\$1,016	\$0	\$0	29.03% \$729	\$3,240
		Operator & Water Wagon												
15		1.00 DIRT		CN-EQMD	6,774.00	CY	41	\$36.78 \$1,495		\$1,761	\$0	\$0	29.03% \$945	\$4,201
		Operator & Motor Grader												
16		1.00 DIRT		CN-EQMD	6,774.00	CY	41	\$36.78 \$1,495		\$1,016	\$0	\$0	29.03% \$729	\$3,240
		Operator & Compactor												
17		1.00 DIRT		CN-SURR	40.00	Hrs.	40	\$34.68 \$1,387		\$0	\$0	\$0	29.03% \$403	\$1,790
		Grade Checker												
18		1.00 DIRT		CN-GEN	80.00	Hrs.	80	\$45.00 \$3,600		\$0	\$0	\$0	29.03% \$1,045	\$4,645
		Foreman & Pickup												
19		Vegetated Soil Layer Basis of Estimate: Assume this soil will be imported from an on-site source at no cost to the subcontractor or project.												
							1,391	\$51,490		\$58,345	\$4,778	\$0	\$33,272	\$147,885
20		1.00 DIRT		CN-EQMD	9,669.00	CY	58	\$36.78 \$2,134		\$967	\$0	\$0	29.03% \$900	\$4,001
		Operator & Loader												
21		1.00 DIRT		CN-TRHV	9,669.00	CY	967	\$36.34 \$35,137		\$50,279	\$0	\$0	29.03% \$24,796	\$110,212
		Teamster & Belly Dump Memo: Assume 2 Hr. for round trip with 20 cubic yard belly dump.												
22		1.00 DIRT		CN-EQMD	9,669.00	CY	58	\$36.78 \$2,134		\$1,450	\$0	\$0	29.03% \$1,040	\$4,625
		Operator & Water Wagon												
23		1.00 DIRT		CN-EQMD	9,669.00	CY	58	\$36.78 \$2,134		\$2,514	\$0	\$0	29.03% \$1,349	\$5,997
		Operator & Motor Grader												
24		1.00 DIRT		CN-EQMD	9,669.00	CY	58	\$36.78 \$2,134		\$1,450	\$0	\$0	29.03% \$1,040	\$4,625
		Operator & Compactor												

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Estimating Services Department

Material Costs where applicable include Idaho State Sales Tax  
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# Detail Item Report

Project Name: CPP-603 EE/ICA Alternatives  
Options 2, 3, 4, 5  
Project Location: INEEL / INTEC  
Estimate Number: 2731-B

Client: B. T. Richards  
Prepared By: D. T. Peterson / R. R. Honsinger  
Estimate Type: Planning/ROM

#	Code	Description	Contractor	Resource	Qty	UOM	Labor Hours	Labor Hourly Rate	Equip Hours	Equipment Hourly Rate	Material Unit Cost	Subcontract Unit Cost	Other %	TOTAL COST
25		Grade Checker	1.00 DIRT	CN-SURR	40.00	Hrs.	40	\$34.68 \$1,387		\$0	\$0	\$0	29.03% \$403	\$1,790
26		Allowance for seeding	1.00 DIRT	CN-EQMD	175.00	M. S. F	53	\$36.78 \$1,931		\$935	\$27.30 \$4,778	\$0	29.03% \$2,219	\$9,862
27		Foreman & Pickup	1.00 DIRT	CN-GEN	100.00	Hrs.	100	\$45.00 \$4,500		\$750	\$0	\$0	29.03% \$1,524	\$6,774

28		Filter Fabric, Sand Drainage Layer & Flexible Membrane Liner					2,373	\$82,951		\$24,833	\$138,418	\$0	\$71,472	\$317,674
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29		Purchase Sand Memo: Assume sand will be imported from an off-Site source.	1.00 DIRT		3,387.00	CY		\$0		\$0	\$15.75 \$53,345	\$0	29.03% \$15,486	\$68,831
30		Operator & Loader	1.00 DIRT	CN-EQMD	3,387.00	CY	20	\$36.78 \$747		\$339	\$0	\$0	29.03% \$315	\$1,401
31		Teamster & Belly Dump Memo: Assume 4 Hr. for round trip with 20 cubic yard belly dump.	1.00 DIRT	CN-TRHV	3,387.00	CY	677	\$36.34 \$24,617		\$17,612	\$0	\$0	29.03% \$12,259	\$54,488
32		Operator & Water Wagon	1.00 DIRT	CN-EQMD	3,387.00	CY	20	\$36.78 \$747		\$508	\$0	\$0	29.03% \$364	\$1,620
33		Operator & Motor Grader	1.00 DIRT	CN-EQMD	3,387.00	CY	20	\$36.78 \$747		\$881	\$0	\$0	29.03% \$473	\$2,101
34		Operator & Compactor	1.00 DIRT	CN-EQMD	3,387.00	CY	20	\$36.78 \$747		\$508	\$0	\$0	29.03% \$364	\$1,620
35		Grade Checker	1.00 DIRT	CN-SURR	20.00	Hrs.	20	\$34.68 \$694		\$0	\$0	\$0	29.03% \$201	\$895

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Estimating Services Department

Material Costs where applicable include Idaho State Sales Tax  
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Project Name: **CPP-603 EE/ICA Alternatives**  
Options 2, 3, 4, 5  
Project Location: **INEEL / INTEC**  
Estimate Number: **2731-B**

### Detail Item Report

Client: **B. T. Richards**  
Prepared By: **D. T. Peterson / R. R. Honsinger**  
Estimate Type: **Planning/ROM**

#	Code	Description	Contractor	Resource	Qty	UOM	Labor Hrs	Labor Hourly Rate	Equip Hours	Equipment Hourly Rate	Material Unit Cost	Subcontract Unit Cost	Other %	TOTAL COST
36		Filter Fabric	1.00 DIRT	CN-LABR	174,240.00	SF	697	\$32.75 \$22,825		\$1,742	\$0.21 \$36,590	\$0	29.03% \$17,754	\$78,912
37		Flexible Membrane	1.00 DIRT	CN-LABR	174,240.00	SF	697	\$32.75 \$22,825		\$1,742	\$0.28 \$48,482	\$0	29.03% \$21,206	\$94,257
38		Foreman & Pickup	1.00 DIRT	CN-GEN	200.00	Hrs.	200	\$45.00 \$9,000		\$1,500	\$0	\$0	29.03% \$3,048	\$13,548
39		Engineering					520	\$33,729		\$0	\$0	\$0	\$0	\$33,729
40	E04	CIVIL ENGINEERING	1.00 ICP	E04	240.00	Hrs.	240	\$63.01 \$15,122		\$0	\$0	\$0	\$0	\$15,122
41	E18	RADIOLOGICAL ENGINEERING	1.00 ICP	E18	40.00	Hrs.	40	\$60.64 \$2,426		\$0	\$0	\$0	\$0	\$2,426
42	E28	PROJ MGMT - ENGINEERING/SCIEN	1.00 ICP	E28	80.00	Hrs.	80	\$72.34 \$5,787		\$0	\$0	\$0	\$0	\$5,787
43	T03	DRAFTER	1.00 ICP	T03	80.00	Hrs.	80	\$35.20 \$2,816		\$0	\$0	\$0	\$0	\$2,816
44	Z04	MANAGER, SCI/ENG FUNCTION	1.00 ICP	Z04	80.00	Hrs.	80	\$94.72 \$7,578		\$0	\$0	\$0	\$0	\$7,578
45		Monitoring Wells					0	\$0		\$0	\$0	\$600,000	\$0	\$600,000
46		Monitoring Wells	1.00 ICP					\$0		\$0	\$0	\$150,000.00 \$600,000	\$0	\$600,000
Memo: Cost based on information provided by BBWI Surv, Monitor & Long Term Ops personnel.														

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Material Costs where applicable include Idaho State Sales Tax  
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Project Name: CPP-603 EEICA Alternatives  
Options 2, 3, 4, 5  
Project Location: INEEL / INTEC  
Estimate Number: 2731-B

### Detail Item Report

Client: B. T. Richards  
Prepared By: D. T. Peterson / R. R. Honsinger  
Estimate Type: Planning/ROM

#	Code	Description	Contractor	Resource	Qty	UOM	Labor Hours	Labor Hourly Rate Cost	Equip Hours	Equipment Hourly Rate Cost	Material Unit Cost Cost	Subcontract Unit Cost Cost	Other % Cost	TOTAL COST
47		Project Management & Support					8,292	\$431,516		\$0	\$0	\$0	\$50,143	\$481,659
48	E28	1.00 ICP		E28	1.00	Year	1,750	\$72.34 \$126,595		\$0	\$0	\$0	\$0	\$126,595
49	X12	1.00 ICP		X12	1.00	Year	1,750	\$48.62 \$85,085		\$0	\$0	\$0	\$0	\$85,085
50	U60-INL	1.00 7600-7632		U60-INL	1.00	Year	1,750	\$38.39 \$67,183		\$0	\$0	\$0	65.00% \$43,669	\$110,851
51	Z08	1.00 7600-7632		Z08-INL	1.00	Year	175	\$56.92 \$9,961		\$0	\$0	\$0	65.00% \$6,475	\$16,436
52	E19	1.00 ICP		E19	1.00	Year	875	\$58.42 \$51,118		\$0	\$0	\$0	\$0	\$51,118
53	S08	1.00 ICP		S08	1.00	Year	875	\$48.47 \$42,411		\$0	\$0	\$0	\$0	\$42,411
54	P44	1.00 ICP		P44	1.00	Year	437	\$46.21 \$20,194		\$0	\$0	\$0	\$0	\$20,194
55	F22	1.00 ICP		F22	1.00	Year	170	\$52.99 \$9,008		\$0	\$0	\$0	\$0	\$9,008
56	A14	1.00 ICP		A14	1.00	Year	350	\$23.05 \$8,068		\$0	\$0	\$0	\$0	\$8,068
57	P21	1.00 ICP		P21	1.00	Year	160	\$74.34 \$11,894		\$0	\$0	\$0	\$0	\$11,894

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# Detail Item Report

Project Name: CPP-603 EE/ICA Alternatives  
Options 2, 3, 4, 5  
Project Location: INEEL / INTEC  
Estimate Number: 2731-B

Client: B. T. Richards  
Prepared By: D. T. Peterson / R. R. Honsinger  
Estimate Type: Planning/ROM

#	Code	Description	Contractor	Resource	Qty	UOM	Labor Hours	Labor Hourly Rate	Equip Hours	Equipment Hourly Rate	Material Unit Cost	Subcontract Unit Cost	Other % Cost	TOTAL COST
58		S&M Costs					12,800	\$470,080		\$0	\$0	\$0	\$1,080,414	\$1,550,494
59	U60-INL	1.00 7600-7632 RADIOLOGICAL CONTROL TECH ( Monitoring & surveillance )		U60-INL	20.00	Years	3,200	\$38.39 \$122,848		\$0	\$0	\$0	65.00% \$79,851	\$202,699
60	T16-INL	1.00 7100-7350 INDUST SAFETY/HEALTH TECH ( Monitoring & surveillance )		T15-INL	20.00	Years	3,200	\$32.22 \$103,104		\$0	\$0	\$0	65.00% \$87,018	\$170,122
61	F21-INL	1.00 5M00-5M98 OTHER FACILITY SERVICES		U29-INL	20.00	Years	3,200	\$35.88 \$114,816		\$0	\$0	\$0	60.00% \$68,890	\$183,706
62	F28-INL	1.00 P000-P230 SECURITY COORDINATORS		F28-INL	20.00	Years	3,200	\$40.41 \$129,312		\$0	\$0	\$0	50.00% \$64,656	\$193,968
63		1.00 ICP Well monitoring & maintenance Memo: Cost based on information provided by BBWI Surv, Monitor & Long Term Ops personnel.			20.00	Years		\$0		\$0	\$0	\$0	100.00% \$800,000	\$800,000

## OPTION 3

64		Sludge Removal			24,121		\$1,013,287	\$98,040		\$218,159	\$1,550,350	\$1,527,064	\$4,406,900
65		Basis of Estimate:			0		\$0	\$0		\$0	\$1,550,350	\$0	\$1,550,350
66		Sludge Removal			0		\$0	\$0		\$0	\$1,550,350	\$0	\$1,550,350

Costs are based on vendors quote (Duratek) to remove, solidification and on Site disposal of sludge. (March 24, 2004)

67		1.00 ICP Sludge Removal, solidification, and on Site disposal of sludges		N	1.00	LS		\$0		\$0	\$1,520,350.00 \$1,520,350	\$0	\$1,520,350
68		1.00 ICP Allowance for on Site INEEL support (temporary light, air and flush water)			1.00	Project		\$0		\$0	\$10,000.00 \$10,000	\$0	\$10,000
69		1.00 ICP Allowance for Subcontractors PPEs			1.00	Project		\$0		\$0	\$10,000.00 \$10,000	\$0	\$10,000

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Material Costs where applicable include Idaho State Sales Tax  
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Project Name: **CPP-603 EEICA Alternatives**  
 Options 2, 3, 4, 5  
 Project Location: **INEEL / INTEC**  
 Estimate Number: **2731-B**

### Detail Item Report

Client: **B. T. Richards**  
 Prepared By: **D. T. Peterson / R. R. Honsinger**  
 Estimate Type: **Planning/ROM**

#	Code	Description	Contractor	Resource	Qty	UOM	Labor Hours	Labor Hourly Rate	Equip Hours	Equipment Hourly Rate	Material Unit Cost	Subcontract Unit Cost	Other %	TOTAL COST
70		INEEL Equipment & Labor For Loading and Off Loading Materials			1.00	Project		\$0		\$0	\$0	\$10,000.00	\$0	\$10,000
71		Basin Water Removal To ICDF Evaporation Pond			0			\$0		\$0	\$0	\$0		\$486,892
72		Design & construct pipe line, includes pump costs for 2 months			1.00	LS		\$0		\$0	\$0	\$0	100.00%	\$486,892
Memo: Costs are based on Estimate File No. 8530 DWP2-007A. This estimate was completed in FY 2000, and costs have been escalated at an average rate of 3% per year to 2004 dollars. It was assumed no ICDF costs would be charged to the project. FY 2000 \$432,597.														
73		Basin Grouting With Rapid Water Removal			0			\$0		\$0	\$0	\$0		\$585,398
Basis of Estimate: Estimate is based on Estimate File No. 2361-D cost are represented in FY-04 dollars.														
74		Concrete Placement			1.00	LS		\$0		\$0	\$0	\$0	100.00%	\$585,398
75		Earth Cap Over Building Foot Print			3,029			\$111,690		\$98,040	\$218,159	\$0		\$552,106
76		Purchase & Haul Low - Permeability Soil Layer			1,637			\$60,200		\$39,696	\$213,381	\$0		\$404,221
77		Purchase Low Permeability Soil			6,774.00	CY		\$0		\$0	\$31.50	\$0	29.03%	\$275,326
Memo: Assume soil will be imported from an off-Site source.														
78		Operator & Loader			6,774.00	CY	41	\$36.78		\$677	\$0	\$0	29.03%	\$2,803
79		Teamster & Belly Dump			6,774.00	CY	1,355	\$36.34		\$35,225	\$0	\$0	29.03%	\$108,976
Memo: Assume 4 Hr. for round trip with 20 cubic yard belly dump.														

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Material Costs where applicable include Idaho State Sales Tax

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Project Name: **CPP-603 EE/ICA Alternatives**  
Options 2, 3, 4, 5  
Project Location: **INEEL / INTEC**  
Estimate Number: **2731-B**

### Detail Item Report

Client: **B. T. Richards**  
Prepared By: **D. T. Peterson / R. R. Honsinger**  
Estimate Type: **Planning/ROM**

#	Code	Description	Contractor	Resource	Qty	UOM	Labor Hours	Labor Hourly Rate	Equip Hours	Equipment Hourly Rate	Material Unit Cost	Subcontract Unit Cost	Other %	TOTAL COST
80		1.00 DIRT		CN-EQMD	6,774.00	CY	41	\$36.78 \$1,495		\$1,016	\$0	\$0	29.03% \$729	\$3,240
Operator & Water Wagon														
81		1.00 DIRT		CN-EQMD	6,774.00	CY	41	\$36.78 \$1,495		\$1,761	\$0	\$0	29.03% \$945	\$4,201
Operator & Motor Grader														
82		1.00 DIRT		CN-EQMD	6,774.00	CY	41	\$36.78 \$1,495		\$1,016	\$0	\$0	29.03% \$729	\$3,240
Operator & Compactor														
83		1.00 DIRT		CN-SURR	40.00	Hrs.	40	\$34.88 \$1,387		\$0	\$0	\$0	29.03% \$403	\$1,790
Grade Checker														
84		1.00 DIRT		CN-GEN	80.00	Hrs.	80	\$45.00 \$3,600		\$0	\$0	\$0	29.03% \$1,045	\$4,645
Foreman & Pickup														

85 **Vegetated Soil Layer** **1,391** **\$51,490** **\$58,345** **\$4,778** **\$0** **\$33,272** **\$147,885**  
Basis of Estimate: **Assume this soil will be imported from an on-site source at no cost to the subcontractor or project.**

87		1.00 DIRT		CN-EQMD	9,669.00	CY	58	\$36.78 \$2,134		\$967	\$0	\$0	29.03% \$900	\$4,001
Operator & Loader														
88		1.00 DIRT		CN-TRHV	9,669.00	CY	967	\$36.34 \$35,137		\$50,279	\$0	\$0	29.03% \$24,796	\$110,212
Teamster & Belly Dump Memo: Assume 2 Hr. for round trip with 20 cubic yard belly dump.														
89		1.00 DIRT		CN-EQMD	9,669.00	CY	58	\$36.78 \$2,134		\$1,450	\$0	\$0	29.03% \$1,040	\$4,625
Operator & Water Wagon														
90		1.00 DIRT		CN-EQMD	9,669.00	CY	58	\$36.78 \$2,134		\$2,514	\$0	\$0	29.03% \$1,349	\$5,997
Operator & Motor Grader														
91		1.00 DIRT		CN-EQMD	9,669.00	CY	58	\$36.78 \$2,134		\$1,450	\$0	\$0	29.03% \$1,040	\$4,625
Operator & Compactor														

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# Detail Item Report

Project Name: CPP-603 EE/CA Alternatives  
Options 2, 3, 4, 5  
Project Location: INEEL / INTEC  
Estimate Number: 2731-B

Client: B. T. Richards  
Prepared By: D. T. Peterson / R. Honsinger  
Estimate Type: Planning/ROM

#	Code	Description	Contractor	Resource	Qty	UOM	Labor Hours	Labor Hourly Rate	Equip Hours	Equipment Hourly Rate	Material Unit Cost	Subcontract Unit Cost	Other % Cost	TOTAL COST
92		Grade Checker	1.00 DIRT	CN-SURR	40.00	Hrs.	40	\$34.68 \$1,387		\$0	\$0	\$0	29.03% \$403	\$1,790
93		Allowance for seeding	1.00 DIRT	CN-EQMD	175.00	M. S. F	53	\$38.78 \$1,931		\$935	\$27.30 \$4,778	\$0	29.03% \$2,219	\$9,862
94		Foreman & Pickup	1.00 DIRT	CN-GEN	100.00	Hrs.	100	\$45.00 \$4,500		\$750	\$0	\$0	29.03% \$1,524	\$6,774

## Project Management & Support

95							8,292	\$431,516		\$0	\$0	\$0	\$50,143	\$481,659
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96	E28	1.00 ICP	E28		1.00	Year	1,750	\$72.34 \$126,595		\$0	\$0	\$0	\$0	\$126,595
97	X12	1.00 ICP	X12		1.00	Year	1,750	\$48.62 \$85,085		\$0	\$0	\$0	\$0	\$85,085
98	U60-INL	1.00 7600-7632	U60-INL		1.00	Year	1,750	\$38.39 \$67,183		\$0	\$0	\$0	65.00% \$43,669	\$110,851
99	Z08	1.00 7600-7632	Z08-INL		1.00	Year	175	\$56.92 \$9,961		\$0	\$0	\$0	65.00% \$6,475	\$16,436
100	E19	1.00 ICP	E19		1.00	Year	875	\$58.42 \$51,118		\$0	\$0	\$0	\$0	\$51,118
101	S08	1.00 ICP	S08		1.00	Year	875	\$48.47 \$42,411		\$0	\$0	\$0	\$0	\$42,411
102	P44	1.00 ICP	P44		1.00	Year	437	\$46.21 \$20,194		\$0	\$0	\$0	\$0	\$20,194
103	F22	1.00 ICP	F22		1.00	Year	170	\$52.99 \$9,008		\$0	\$0	\$0	\$0	\$9,008

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Material Costs where applicable include Idaho State Sales Tax  
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Project Name: CPP-603 EEICA Alternatives  
Options 2, 3, 4, 5  
Project Location: INEEL / INTEC  
Estimate Number: 2731-B

### Detail Item Report

Client: B. T. Richards  
Prepared By: D. T. Peterson / R. R. Honsinger  
Estimate Type: Planning/ROM

#	Code	Description	Contractor	Resource	Qty	UOM	Labor Hours	Labor Hourly Rate Cost	Equip Hours	Equipment Hourly Rate Cost	Material Unit Cost Cost	Subcontract Unit Cost Cost	Other % Cost	TOTAL COST
104	A14	SECRETARIAL	ICP	A14	1.00	Year	350	\$23.05 \$8,068		\$0	\$0	\$0	\$0	\$8,068
105	P21	SUBCONTRACT ADMIN	ICP	P21	1.00	Year	160	\$74.34 \$11,894		\$0	\$0	\$0	\$0	\$11,894
106		S&M Costs					12,800	\$470,080		\$0	\$0	\$0	\$280,414	\$750,494
107	U60-INL	1.00 7600-7632 RADIOLOGICAL CONTROL TECH ( Monitoring & surveillance )		U60-INL	20.00	Years	3,200	\$38.39 \$122,848		\$0	\$0	\$0	65.00% \$79,851	\$202,699
108	T16-INL	1.00 7100-7350 INDUST SAFETY/HEALTH TECH ( Monitoring & surveillance )		T15-INL	20.00	Years	3,200	\$32.22 \$103,104		\$0	\$0	\$0	65.00% \$67,018	\$170,122
109	F21-INL	1.00 5M00-5M9B OTHER FACILITY SERVICES		U29-INL	20.00	Years	3,200	\$35.88 \$114,816		\$0	\$0	\$0	60.00% \$68,890	\$183,706
110	F28-INL	1.00 P000-P230 SECURITY COORDINATORS		F28-INL	20.00	Years	3,200	\$40.41 \$129,312		\$0	\$0	\$0	50.00% \$64,656	\$193,968
111		OPTION 4					28,827	\$1,884,318		\$98,040	\$454,409	\$1,550,350	\$1,585,343	\$5,572,460
112		Sludge Removal					0	\$0		\$0	\$0	\$1,550,350	\$0	\$1,550,350
		Basis of Estimate:												
		Costs are based on vendors quote (Duratek) to remove, solidification and on Site disposal of sludge. (March 24, 2004)												
113		1.00 ICP Sludge Removal, solidification, and on Site disposal of sludges			1.00	LS		\$0		\$0	\$0	\$1,520,350.00	\$0	\$1,520,350
114		1.00 ICP Allowance for on Site INEEL support (temporary light, air and flush water)			1.00	Project		\$0		\$0	\$0	\$10,000.00	\$0	\$10,000

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Estimating Services Department

Material Costs where applicable include Idaho State Sales Tax  
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# Detail Item Report

Project Name: CPP-603 EE/ICA Alternatives  
 Options 2, 3, 4, 5  
 Project Location: INEEL / INTEC  
 Estimate Number: 2731-B

Client: B. T. Richards  
 Prepared By: D. T. Peterson / R. R. Honsinger  
 Estimate Type: Planning/ROM

#	Code	Description	Contractor	Resource	Qty	UOM	Labor Hours	Labor Hourly Rate	Equip Hours	Equipment Hourly Rate	Material Unit Cost	Subcontract Unit Cost	Other % Cost	TOTAL COST
115		Allowance for Subcontractors PPEs	1.00 ICP		1.00	Project		\$0		\$0	\$0	\$10,000.00	\$0	\$10,000
116		INEEL Equipment & Labor For Loading and Off Loading Materials	1.00 ICP		1.00	Project		\$0		\$0	\$0	\$10,000.00	\$0	\$10,000
117		Debris Removal					640	\$661,220		\$0	\$236,250	\$0	\$33,208	\$930,678
		Basis of Estimate:												
		Assumes a total of 10,000 lbs of debris. 8,000 lbs. of big pieces and 2,000 lb of small pieces ( 20lbs or less). Assume North Basin with 250 lbs. of small pieces. Assume Middle Basin with 250 lbs. of small pieces. Assume Transfer Canal with 250 lbs. of small pieces. Assume South Basin with 8,000 lbs of big items, and 1250 lbs. of smaller pieces. Assumes structural racks and structural members are removed from basins (wt. unknown).												
118		North Basin - Debris Removal					0	\$87,600		\$0	\$10,080	\$0	\$0	\$97,680
		Basis of Estimate:												
		Assumes the D-Racks will be removed. Assume the misc. debris in north basin to be mainly small item 20 lbs. or less and will be loaded into 4x4x6 waste boxes for disposal to RWMC. Assume 6 man crew. Allow 8 days for misc. debris removal, 8 days for D Rack removal, & 8 days for work planning.												
119		Remove misc small debris -250 lbs, 480 hours	1.00 ICP		1.00	lot		\$28,800		\$0	\$0	\$0	\$0	\$28,800
120		Material - waste boxes	1.00 ICP		2.00	ea		\$0		\$0	\$840.00	\$0	\$0	\$1,680
121		Material - PPE, tools	1.00 ICP		16.00	days		\$0		\$0	\$525.00	\$0	\$0	\$8,400
122		Transport to RWMC	1.00 ICP		2.00	boxes		\$6,000		\$0	\$0	\$0	\$0	\$6,000
123		Work Planning	1.00 ICP		4.00	WO		\$24,000		\$0	\$0	\$0	\$0	\$24,000
124		Remove D Racks - 8 Days 480 Hrs.	1.00 ICP		1.00	LS		\$28,800		\$0	\$0	\$0	\$0	\$28,800

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Material Costs where applicable include Idaho State Sales Tax  
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Project Name: **CPP-603 EE/ICA Alternatives**  
Options 2, 3, 4, 5  
Project Location: **INEEL / INTEC**  
Estimate Number: **2731-B**

### Detail Item Report

Client: **B. T. Richards**  
Prepared By: **D. T. Peterson / R. R. Honsinger**  
Estimate Type: **Planning/ROM**

#	Code	Description	Contractor	Resource	Qty	UOM	Labor Hours	Labor Hourly Rate	Equip Hours	Equipment Hourly Rate	Material Unit Cost	Subcontract Unit Cost	Other % Cost	TOTAL COST
125		Middle Basin - Debris Removal					0	\$73,200		\$0	\$7,980	\$0	\$0	\$81,180
Basis of Estimate: Assume same effort as North Basin, except the structural debris removal is assumed to be 1/2 the effort of the D-racks.														
126		Remove misc small debris -250 lbs, 480 hours			1.00	lot		\$28,800		\$0	\$0	\$0	\$0	\$28,800
127		Material - waste boxes			2.00	ea		\$0		\$0	\$840.00 \$1,680	\$0	\$0	\$1,680
128		Material - PPE, tools			12.00	days		\$0		\$0	\$525.00 \$6,300	\$0	\$0	\$6,300
129		Transport to RWMC			2.00	boxes		\$6,000		\$0	\$0	\$0	\$0	\$6,000
130		Work Planning			4.00	WO		\$24,000		\$0	\$0	\$0	\$0	\$24,000
131		Remove Miscellaneous Structural 4 Days 240 Hrs.			1.00	LS		\$14,400		\$0	\$0	\$0	\$0	\$14,400
132		South Basin - Debris Removal					0	\$352,888		\$0	\$204,750	\$0	\$0	\$557,638
Basis of Estimate: Assume 8000 lb of large items to remove, size, and place into cargo containers (see vans) for disposal as LLW at RWMC. Assume 1000 lbs of high rad waste currently in 2 ea hot waste boxes. Assume 250 lbs. of misc small item on floor of canal to dispose in waste boxes as LLW at RWMC. Assume 4,000 lbs of racks and structural debris to be removed and loaded into cargo containers.														
133		Remove, Size, & dispose of Large Items			8,000.00	lbs		\$158,000		\$0	\$0	\$0	\$0	\$158,000
Memo: Assume cost to be 1.5 times the actual cost for debris removal MTR canal (MTR debris removal at \$13.15/lb ave.) due to rad exposure and concerns, accessibility, cloudy basin water conditions.														
134		Remove HIGH RAD Waste from waste boxes			1,000.00	lbs		\$39,450		\$0	\$0	\$0	\$0	\$39,450
Memo: Assume removal of existing hot waste box contents into the cask baskets as used at MTR canal. Cask Baskets loaded into the CNS-1-13-II-C shipping casks, as used at MTR canal. Assume labor at 3 X the average MTR cost. Location of existing boxes is known, and rad levels of some items is estimated at 200R to 300R. Confirm.														

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# Detail Item Report

Project Name: CPP-603 EE/ICA Alternatives  
Options 2, 3, 4, 5  
Project Location: INEEL / INTEC  
Estimate Number: 2731-B

Client: B. T. Richards  
Prepared By: D. T. Peterson / R. R. Honsinger  
Estimate Type: Planning/ROM

#	Code	Description	Contractor	Resource	Qty	UOM	Labor Hours	Labor Hourly Rate	Equip Hours	Equipment Hourly Rate	Material Unit Cost	Subcontract Unit Cost	Other % Cost	TOTAL COST
135		Material - Cask Baskets	1.00 ICP								\$26,250.00			\$26,250.00
		Memo: Assume cost at apprx. 1/2 the cost expended at MTR canal for engineering/fabrication/inspection. Assume use of cask baskets that are unused from MTR Canal.			2.00			\$0		\$0	\$52,500	\$0	\$0	\$52,500
136		Material - Shipping cask	1.00 ICP								\$52,500.00			\$52,500.00
		Memo: Allowance of \$50,000. Confirm with H. Heidkamp if shipping cask used at MTR is available.			1.00			\$0		\$0	\$52,500	\$0	\$0	\$52,500
137		Remove misc small items from canal floor	1.00 ICP								\$0			\$0
		Memo: Assume labor at 5 X the average MTR cost due to unknown locations, unknown rad levels, and unknown method of retrieval.			250.00	lbs		\$16,438		\$0	\$0	\$0	\$0	\$16,438
138		Material - cargo containers & waste boxes	1.00 ICP								\$15,750.00			\$15,750.00
					1.00			\$0		\$0	\$15,750	\$0	\$0	\$15,750
139		Material - PPE and misc supplies	1.00 ICP								\$1,050.00			\$1,050.00
					80.00	days		\$0		\$0	\$84,000	\$0	\$0	\$84,000
140		Work Planning	1.00 ICP								\$0			\$0
					10.00	WO		\$60,000		\$0	\$0	\$0	\$0	\$60,000
141		Remove Racks & Structural	1.00 ICP								\$0			\$0
					4,000.00	Lbs.		\$79,000		\$0	\$0	\$0	\$0	\$79,000

142 Canal - Debris Removal  
Basis of Estimate: Assume 500 lbs of misc small debris to remove. 0 \$93,600 \$0 \$11,760 \$0 \$105,360

143		Remove misc small debris -500 lbs, 960 hours	1.00 ICP								\$0			\$0
					1.00	lot		\$57,600		\$0	\$0	\$0	\$0	\$57,600
144		Material - waste boxes	1.00 ICP								\$840.00			\$840.00
					4.00	ea		\$0		\$0	\$3,360	\$0	\$0	\$3,360
145		Material - PPE, tools	1.00 ICP								\$525.00			\$525.00
					16.00	days		\$0		\$0	\$8,400	\$0	\$0	\$8,400

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Material Costs where applicable include Idaho State Sales Tax  
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Project Name: **CPP-603 EEICA Alternatives**  
Options 2, 3, 4, 5  
Project Location: **INEEL / INTEC**  
Estimate Number: **2731-B**

### Detail Item Report

Client: **B. T. Richards**  
Prepared By: **D. T. Peterson / R. R. Honsinger**  
Estimate Type: **Planning/ROM**

#	Code	Description	Contractor	Resource	Qty	UOM	Labor Hours	Labor Hourly Rate Cost	Equip Hours	Equipment Hourly Rate Cost	Material Unit Cost	Subcontract Unit Cost	Other % Cost	TOTAL COST
146		Transport to RWIMC	1.00 ICP		4.00	boxes		\$12,000		\$0	\$0	\$0	\$0	\$12,000
147		Work Planning	1.00 ICP		4.00	WO		\$24,000		\$0	\$0	\$0	\$0	\$24,000
148		Engineering and Remote Tool Development					640	\$53,933		\$0	\$1,680	\$0	\$33,208	\$88,820
149		Allowance for remote tooling engineering	1.00 4800	E38-INL	640.00	hours	640	\$61.77 \$39,533		\$0	\$0	\$0	84.00% \$33,208	\$72,740
150		Fab and test tools Memo: Assume 3 men per day.	1.00 ICP		8.00	days		\$14,400		\$0	\$210.00 \$1,680	\$0	\$0	\$16,080
151		Basin Water Removal To ICDF Evaporation Pond					0	\$0		\$0	\$0	\$0	\$486,892	\$486,892
152		Design & construct pipe line, includes pump costs for 2 months Memo: Costs are based on Estimate File No. 8530 DWP2-007A. This estimate was completed in FY 2000, and costs have been escalated at an average rate of 3% per year to 2004 dollars. It was assumed no ICDF costs would be charged to the project. FY 2000 \$432,597.	1.00 ICP		1.00	LS		\$0		\$0	\$0	\$0	100.00% \$486,892	\$486,892
153		Basin Grouting With Rapid Water Removal Basis of Estimate: Estimate is based on Estimate File No. 2361-D cost are represented in FY-04 dollars.					0	\$0		\$0	\$0	\$0	\$585,398	\$585,398
154		Concrete Placement	1.00 ICP		1.00	LS		\$0		\$0	\$0	\$0	100.00% \$585,398	\$585,398
155		Earth Cap Over Building Foot Print					3,029	\$111,690		\$98,040	\$218,159	\$0	\$124,216	\$552,106

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# Detail Item Report

Project Name: CPP-603 EE/CA Alternatives  
 Options 2, 3, 4, 5  
 Project Location: INEEL / INTEC  
 Estimate Number: 2731-B

Client: B. T. Richards  
 Prepared By: D. T. Peterson / R. R. Honsinger  
 Estimate Type: Planning/ROM

#	Code	Description	Contractor	Resource	Qty	UOM	Labor Hours	Labor Hourly Rate	Equip Hours	Equipment Hourly Rate	Material Unit Cost	Subcontract Unit Cost	Other %	TOTAL COST
156		Purchase & Haul Low - Permeability Soil Layer					1,637	\$60,200		\$39,696	\$213,381	\$0	29.03%	\$404,221
157		1.00 DIRT									\$31.50			
		Purchase Low Permeability Soil						\$0		\$0	\$213,381	\$0	29.03%	\$275,326
		Memo: Assume soil will be imported from an off-Site source.												
158		1.00 DIRT		CN-EQMD	6,774.00	CY	41	\$36.78		\$677	\$0	\$0	29.03%	\$2,803
		Operator & Loader						\$1,495						
159		1.00 DIRT		CN-TRHV	6,774.00	CY	1,355	\$36.34		\$35,225	\$0	\$0	29.03%	\$108,976
		Teamster & Belly Dump						\$49,233						
		Memo: Assume 4 Hr. for round trip with 20 cubic yard belly dump.												
160		1.00 DIRT		CN-EQMD	6,774.00	CY	41	\$36.78		\$1,016	\$0	\$0	29.03%	\$3,240
		Operator & Water Wagon						\$1,495						
161		1.00 DIRT		CN-EQMD	6,774.00	CY	41	\$36.78		\$1,761	\$0	\$0	29.03%	\$4,201
		Operator & Motor Grader						\$1,495						
162		1.00 DIRT		CN-EQMD	6,774.00	CY	41	\$36.78		\$1,016	\$0	\$0	29.03%	\$3,240
		Operator & Compactor						\$1,495						
163		1.00 DIRT		CN-SURR	40.00	Hrs.	40	\$34.68		\$0	\$0	\$0	29.03%	\$1,790
		Grade Checker						\$1,387						
164		1.00 DIRT		CN-GEN	80.00	Hrs.	80	\$45.00		\$0	\$0	\$0	29.03%	\$4,645
		Foreman & Pickup						\$3,600						
165		Vegetated Soil Layer					1,391	\$51,490		\$58,345	\$4,778	\$0		\$147,885
		Basis of Estimate:												
		Assume this soil will be imported from an on-Site source at no cost to the subcontractor or project.												
166		1.00 DIRT		CN-EQMD	9,669.00	CY	58	\$36.78		\$967	\$0	\$0	29.03%	\$4,001
		Operator & Loader						\$2,134						

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Material Costs where applicable include Idaho State Sales Tax  
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Project Name: CPP-603 EE/ICA Alternatives  
Options 2, 3, 4, 5  
Project Location: INEEL / INTEC  
Estimate Number: 2731-B

### Detail Item Report

Client: B. T. Richards  
Prepared By: D. T. Peterson / R. R. Honsinger  
Estimate Type: Planning/ROM

#	Code	Description	Contractor	Resource	Qty	UOM	Labor Hours	Labor Hourly Rate	Equip Hours	Equipment Hourly Rate	Material Unit Cost	Subcontract Unit Cost	Other %	TOTAL COST
167		Teamster & Belly Dump Memo: Assume 2 Hr. for round trip with 20 cubic yard belly dump.	1.00 DIRT	CN-TRHV	9,669.00	CY	967	\$36.34 \$35,137		\$50,279	\$0	\$0	29.03% \$24,796	\$110,212
168		Operator & Water Wagon	1.00 DIRT	CN-EQMD	9,669.00	CY	58	\$36.78 \$2,134		\$1,450	\$0	\$0	29.03% \$1,040	\$4,625
169		Operator & Motor Grader	1.00 DIRT	CN-EQMD	9,669.00	CY	58	\$36.78 \$2,134		\$2,514	\$0	\$0	29.03% \$1,349	\$5,997
170		Operator & Compactor	1.00 DIRT	CN-EQMD	9,669.00	CY	58	\$36.78 \$2,134		\$1,450	\$0	\$0	29.03% \$1,040	\$4,625
171		Grade Checker	1.00 DIRT	CN-SURR	40.00	Hrs.	40	\$34.68 \$1,387		\$0	\$0	\$0	29.03% \$403	\$1,790
172		Allowance for seeding	1.00 DIRT	CN-EQMD	175.00	M. S. F	53	\$36.78 \$1,931		\$935	\$27.30 \$4,778	\$0	29.03% \$2,219	\$9,862
173		Foreman & Pickup	1.00 DIRT	CN-GEN	100.00	Hrs.	100	\$45.00 \$4,500		\$750	\$0	\$0	29.03% \$1,524	\$6,774
174		Project Management & Support						\$641,327	12,358	\$0	\$0	\$0	\$75,215	\$716,542
175	E28	PROJ MGMT - ENGINEERING/SCIEN 1 FTE	1.00 ICP	E28	1.50	Year	2,625	\$72.34 \$189,893		\$0	\$0	\$0	\$0	\$189,893
176	X12	ENVIRONMENTAL RESTORATION	1.00 ICP	X12	1.50	Year	2,625	\$48.62 \$127,628		\$0	\$0	\$0	\$0	\$127,628
177	U60-INL	RADIOLOGICAL CONTROL TECH	1.00 7600-7632	U60-INL	1.50	Year	2,625	\$38.39 \$100,774		\$0	\$0	\$0	65.00% \$65,503	\$166,277
178	Z08	SUPERVISOR, OPERATIONS	1.00 7600-7632	Z08-INL	1.50	Year	263	\$56.92 \$14,942		\$0	\$0	\$0	65.00% \$9,712	\$24,653

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Project Name: CPP-603 EE/ICA Alternatives  
Options 2, 3, 4, 5  
Project Location: INEEL / INTEC  
Estimate Number: 2731-B

### Detail Item Report

Client: B. T. Richards  
Prepared By: D. T. Peterson / R. R. Honsinger  
Estimate Type: Planning/ROM

#	Code	Description	Contractor	Resource	Qty	UOM	Labor Hours	Labor Hourly Rate	Equip Hours	Equipment Hourly Rate	Material Unit Cost	Subcontract Unit Cost	Other % Cost	TOTAL COST
179	E19	1.00 ICP	SAFETY ENGINEERING	E19	1.50	Year	1,313	\$58.42 \$76,676		\$0	\$0	\$0	\$0	\$76,676
180	S08	1.00 ICP	INDUSTRIAL HYGIENE	S08	1.50	Year	1,313	\$48.47 \$63,617		\$0	\$0	\$0	\$0	\$63,617
181	P44	1.00 ICP	PLANNING AND CONTROLS	P44	1.50	Year	656	\$46.21 \$30,291		\$0	\$0	\$0	\$0	\$30,291
182	F22	1.00 ICP	COST ESTIMATING	F22	1.50	Year	255	\$52.99 \$13,512		\$0	\$0	\$0	\$0	\$13,512
183	A14	1.00 ICP	SECRETARIAL	A14	1.50	Year	525	\$23.05 \$12,101		\$0	\$0	\$0	\$0	\$12,101
184	P21	1.00 ICP	SUBCONTRACT ADMIN	P21	1.00	Year	160	\$74.34 \$11,894		\$0	\$0	\$0	\$0	\$11,894
185	S&M Costs				12,800			\$470,080		\$0	\$0	\$0	\$280,414	\$750,494
186	U60-INL	1.00 7600-7632	RADIOLOGICAL CONTROL TECH ( Monitoring & surveillance )	U60-INL	20.00	Years	3,200	\$38.39 \$122,848		\$0	\$0	\$0	65.00% \$79,851	\$202,699
187	T16-INL	1.00 7100-7350	INDUST SAFETY/HEALTH TECH ( Monitoring & surveillance )	T15-INL	20.00	Years	3,200	\$32.22 \$103,104		\$0	\$0	\$0	65.00% \$67,018	\$170,122
188	F21-INL	1.00 5M00-5M9B	OTHER FACILITY SERVICES	U29-INL	20.00	Years	3,200	\$35.88 \$114,816		\$0	\$0	\$0	60.00% \$68,890	\$183,706
189	F28-INL	1.00 P000-P230	SECURITY COORDINATORS	F28-INL	20.00	Years	3,200	\$40.41 \$129,312		\$0	\$0	\$0	50.00% \$64,656	\$193,968
190	OPTION 5				35,997			\$2,057,096	1,250	\$99,990	\$719,614	\$2,079,715	\$1,185,148	\$6,141,564

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# Detail Item Report

Project Name: CPP-603 EE/CA Alternatives  
Options 2, 3, 4, 5  
Project Location: INEEL / INTEC  
Estimate Number: 2731-B

Client: B. T. Richards  
Prepared By: D. T. Peterson / R. R. Honsinger  
Estimate Type: Planning/ROM

#	Code	Description	Contractor	Resource	Qty	UOM	Labor Hours	Labor Hourly Rate	Equip Hours	Equipment Hourly Rate	Material Unit Cost	Subcontract Unit Cost	Other %	TOTAL COST
191		Basin Water Removal To ICDF Evaporation Pond			0		0	\$0		\$0	\$0	\$0	\$486,892	\$486,892
192		Design & construct pipe line, includes pumps costs for 2 months			1.00	LS		\$0		\$0	\$0	\$0	100.00%	\$486,892
Memo: Cost are based on Estimate File No. 8530 DWP2-007A. This estimate was completed in FY 2000, and costs have been escalated at an average rate of 3% per year to 2004 dollars. It was assumed no ICDF costs would be charged to the project. FY 2000 \$432,597.														
193		Sludge Removal			0		0	\$0		\$0	\$0	\$1,550,350	\$0	\$1,550,350
194		Sludge Removal, solidification, and on Site disposal of sludges			1.00	LS		\$0		\$0	\$0	\$1,520,350.00	\$0	\$1,520,350
195		Allowance for on Site INEEL support (temporary light, air and flush water)			1.00	Project		\$0		\$0	\$0	\$10,000.00	\$0	\$10,000
196		Allowance for Subcontractors PPEs			1.00	Project		\$0		\$0	\$0	\$10,000.00	\$0	\$10,000
197		INEEL Equipment & Labor For Loading and Off Loading Materials			1.00	Project		\$0		\$0	\$0	\$10,000.00	\$0	\$10,000
198		Debris Removal			640		640	\$661,220		\$0	\$236,250	\$0	\$33,208	\$930,678
Basis of Estimate: Assumes a total of 10,000 lbs of debris. 8,000 lbs. of big pieces and 2,000 lb of small pieces ( 20lbs or less). Assume North Basin with 250 lbs. of small pieces. Assume Middle Basin with 250 lbs. of small pieces. Assume Transfer Canal with 250 lbs. of small pieces. Assume South Basin with 8,000 lbs of big items, and 1250 lbs. of smaller pieces. Assumes structural racks and structural members are removed from basins(wt unknown).														
199		North Basin - Debris Removal			0		0	\$87,600		\$0	\$10,080	\$0	\$0	\$97,680
Basis of Estimate: Assumes the D-Racks will be removed. Assume the misc. debris in north basin to be mainly small item 20 lbs. or less and will be loaded into 4x4x6 waste boxes for disposal to RWMC. Assume 6 man crew. Allow 8 days for misc. debris removal, 8 days for D Rack removal, & 8 days for work planning.														

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Material Costs where applicable include Idaho State Sales Tax  
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# Detail Item Report

Project Name: CPP-603 EE/ICA Alternatives  
Options 2, 3, 4, 5  
Project Location: INEEL / INTEC  
Estimate Number: 2731-B

Client: B. T. Richards  
Prepared By: D. T. Peterson / R. R. Honsinger  
Estimate Type: Planning/ROM

#	Code	Description	Contractor	Resource	Qty	UOM	Labor Hours	Labor Hourly Rate	Equip Hours	Equipment Hourly Rate	Material Unit Cost	Subcontract Unit Cost	Other % Cost	TOTAL COST
200		1.00 ICP Remove misc small debris -250 lbs, 480 hours		1.00	lot			\$28,800		\$0	\$0	\$0	\$0	\$28,800
201		1.00 ICP Material - waste boxes		2.00	ea			\$0		\$0	\$840.00 \$1,680	\$0	\$0	\$1,680
202		1.00 ICP Material - PPE, tools		16.00	days			\$0		\$0	\$525.00 \$8,400	\$0	\$0	\$8,400
203		1.00 ICP Transport to RWMC		2.00	boxes			\$6,000		\$0	\$0	\$0	\$0	\$6,000
204		1.00 ICP Work Planning		4.00	WO			\$24,000		\$0	\$0	\$0	\$0	\$24,000
205		1.00 ICP Remove D Racks - 8 Days 480 Hrs.		1.00	LS			\$28,800		\$0	\$0	\$0	\$0	\$28,800
206		Middle Basin - Debris Removal Basis of Estimate: Assume same effort as North Basin, except the structural debris removal is assumed to be 1/2 the effort of the D-racks.												
207		1.00 ICP Remove misc small debris -250 lbs, 480 hours		1.00	lot			\$28,800		\$0	\$0	\$0	\$0	\$28,800
208		1.00 ICP Material - waste boxes		2.00	ea			\$0		\$0	\$840.00 \$1,680	\$0	\$0	\$1,680
209		1.00 ICP Material - PPE, tools		12.00	days			\$0		\$0	\$525.00 \$6,300	\$0	\$0	\$6,300
210		1.00 ICP Transport to RWMC		2.00	boxes			\$6,000		\$0	\$0	\$0	\$0	\$6,000
211		1.00 ICP Work Planning		4.00	WO			\$24,000		\$0	\$0	\$0	\$0	\$24,000

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Material Costs where applicable include Idaho State Sales Tax  
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# Detail Item Report

Project Name: CPP-603 EE/ICA Alternatives  
Options 2, 3, 4, 5  
Project Location: INEEL / INTEC  
Estimate Number: 2731-B

Client: B. T. Richards  
Prepared By: D. T. Peterson / R. R. Honsinger  
Estimate Type: Planning/ROM

#	Code	Description	Contractor	Resource	Qty	UOM	Labor Hours	Labor Hourly Rate Cost	Equip Hours	Equipment Hourly Rate Cost	Material Unit Cost Cost	Subcontract Unit Cost Cost	Other % Cost	TOTAL COST
212		Remove Miscellaneous Structural 4 Days 240 Hrs.	1.00 ICP		1.00	LS		\$14,400		\$0	\$0	\$0	\$0	\$14,400
213		South Basin - Debris Removal Basis of Estimate: Assume 8000 lb of large items to remove, size, and place into cargo containers (sea vans) for disposal as LLW at RWMC. Assume 1000 lbs of high rad waste currently in 2 sea hot waste boxes. Assume 250 lbs. of misc small item on floor of canal to dispose in waste boxes as LLW at RWMC. Assume 4,000 lbs of racks and structural debris to be removed and loaded into cargo containers.					0	\$352,888		\$0	\$204,750	\$0	\$0	\$557,638
214		Remove, Size, & dispose of Large Items Memo: Assume cost to be 1.5 times the actual cost for debris removal MTR canal (MTR debris removal at \$13.15/lb ave.) due to rad exposure and concerns, accessibility, cloudy basin water conditions.	1.00 ICP		8,000.00	lbs		\$158,000		\$0	\$0	\$0	\$0	\$158,000
215		Remove HIGH RAD Waste from waste boxes Memo: Assume removal of existing hot waste box contents into the cask baskets as used at MTR canal. Cask Baskets loaded into the CNS-1-13-II-C shipping casks. as used at MTR canal. Assume labor at 3 X the average MTR cost. Location of existing boxes is known, and rad levels of some items is estimated at 200R to 300R. Confirm.	1.00 ICP		1,000.00	lbs		\$39,450		\$0	\$0	\$0	\$0	\$39,450
216		Material - Cask Baskets Memo: Assume cost at approx. 1/2 the cost expended at MTR canal for engineering/fabrication/inspection. Assume use of cask baskets that are unused from MTR Canal.	1.00 ICP		2.00			\$0		\$0	\$26,250.00 \$52,500	\$0	\$0	\$52,500
217		Material - Shipping cask Memo: Allowance of \$50,000. Confirm with H. Heidkamp if shipping cask used at MTR is available.	1.00 ICP		1.00			\$0		\$0	\$52,500.00 \$52,500	\$0	\$0	\$52,500
218		Remove misc small items from canal floor Memo: Assume labor at 5 X the average MTR cost due to unknown locations, unknown rad levels, and unknown method of retrieval.	1.00 ICP		250.00	lbs		\$16,438		\$0	\$0	\$0	\$0	\$16,438
219		Material - cargo containers & waste boxes	1.00 ICP		1.00			\$0		\$0	\$15,750.00 \$15,750	\$0	\$0	\$15,750
220		Material - PPE and misc supplies	1.00 ICP		80.00	days		\$0		\$0	\$1,050.00 \$84,000	\$0	\$0	\$84,000
221		Work Planning	1.00 ICP		10.00	WO		\$60,000		\$0	\$0	\$0	\$0	\$60,000

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Material Costs where applicable include Idaho State Sales Tax  
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# Detail Item Report

Project Name: CPP-603 EEICA Alternatives  
Options 2, 3, 4, 5  
Project Location: INEEL / INTEC  
Estimate Number: 2731-B

Client: B. T. Richards  
Prepared By: D. T. Peterson / R. R. Honsinger  
Estimate Type: Planning/ROM

#	Code	Description	Contractor	Resource	Qty	UOM	Labor Hours	Labor Hourly Rate Cost	Equip Hours	Equipment Hourly Rate Cost	Material Unit Cost Cost	Subcontract Unit Cost Cost	Other % Cost	TOTAL COST
222		Remove Racks & Structural	1.00 ICP		4,000.00	Lbs.		\$79,000		\$0	\$0	\$0	\$0	\$79,000
223		Canal - Debris Removal					0	\$93,600		\$0	\$11,760	\$0	\$0	\$105,360
Basis of Estimate: Assume 500 lbs of misc small debris to remove.														
224		Remove misc small debris -500 lbs, 960 hours	1.00 ICP		1.00	lot		\$57,600		\$0	\$0	\$0	\$0	\$57,600
225		Material - waste boxes	1.00 ICP		4.00	ea		\$0		\$0	\$840.00 \$3,360	\$0	\$0	\$3,360
226		Material - PPE, tools	1.00 ICP		16.00	days		\$0		\$0	\$525.00 \$8,400	\$0	\$0	\$8,400
227		Transport to RWMC	1.00 ICP		4.00	boxes		\$12,000		\$0	\$0	\$0	\$0	\$12,000
228		Work Planning	1.00 ICP		4.00	WO		\$24,000		\$0	\$0	\$0	\$0	\$24,000
229		Engineering and Remote Tool Development					640	\$53,933		\$0	\$1,680	\$0	\$33,208	\$88,820
230		Allowance for remote tooling engineering	1.00 4600	E38-INL	640.00	hours	640	\$61.77 \$39,533		\$0	\$0	\$0	84.00% \$33,208	\$72,740
231		Fab and test tools Memo: Assume 3 men per day.	1.00 ICP		8.00	days		\$14,400		\$0	\$210.00 \$1,680	\$0	\$0	\$16,080
232		Basin Containmentment For Air Borne Contaminaton					6,658	\$264,201		\$0	\$244,206	\$0	\$118,221	\$626,628

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Material Costs where applicable include Idaho State Sales Tax  
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# Detail Item Report

Project Name: CPP-603 EE/ICA Alternatives  
Options 2, 3, 4, 5  
Project Location: INEEL / INTEC  
Estimate Number: 2731-B

Client: B. T. Richards  
Prepared By: D. T. Peterson / R. R. Honsinger  
Estimate Type: Planning/ROM

#	Code	Description	Contractor	Resource	Qty	UOM	Labor Hours	Labor Hourly Rate Cost	Equip Hours	Equipment Hourly Rate Cost	Material Unit Cost Cost	Subcontract Unit Cost Cost	Other % Cost	TOTAL COST
233		Basin Cover Engineering & Design					1,104	\$68,228		\$0	\$0	\$0	\$0	\$68,228
234	E19	1.00 ICP SAFETY ENGINEERING		E19	160.00	Hrs.	160	\$58.42 \$9,347		\$0	\$0	\$0	\$0	\$9,347
235	E18	1.00 ICP RADIOLOGICAL ENGINEERING		E18	160.00	Hrs.	160	\$60.64 \$9,702		\$0	\$0	\$0	\$0	\$9,702
236	E04	1.00 ICP CIVIL ENGINEERING		E04	240.00	Hrs.	240	\$63.01 \$15,122		\$0	\$0	\$0	\$0	\$15,122
237	E06	1.00 ICP ELECTRICAL ENGINEERING		E06	80.00	Hrs.	80	\$61.15 \$4,892		\$0	\$0	\$0	\$0	\$4,892
238	E11	1.00 ICP MECHANICAL ENGINEERING		E11	160.00	Hrs.	160	\$56.27 \$9,003		\$0	\$0	\$0	\$0	\$9,003
239	E05	1.00 ICP DESIGN		E05	160.00	Hrs.	160	\$62.93 \$10,069		\$0	\$0	\$0	\$0	\$10,069
240		Engineering Supervision @ 15% of labor hours		Z09	960.00	Hrs.	144	\$70.08 \$10,092		\$0	\$0	\$0	\$0	\$10,092
241		Basin Cover Construction					4,561	\$160,305		\$0	\$203,669	\$0	\$96,819	\$460,793
242		1.00 5M00-5M9B Structural Support Steel Over Basins (8" X 11.5# channel) Memo: Assume steel will be purchased as fabricated and painted assemblies with bolted connections.		U55-INL	6,000.00	LBS	240	\$35.93 \$8,623		\$0	\$1.05 \$6,300	\$0	34.67% \$5,174	\$20,097
243		1.00 5M00-5M9B Lumber 2 X 6 Fire Treated Memo: Assume lumber will span structural members at 2' on centers.		U06-INL	4,200.00	BF	210	\$35.93 \$7,545		\$0	\$0.84 \$3,528	\$0	40.88% \$4,527	\$15,600

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Project Name: **CPP-603 EE/ICA Alternatives**  
Options 2, 3, 4, 5  
Project Location: **INEEL / INTEC**  
Estimate Number: **2731-B**

### Detail Item Report

Client: **B. T. Richards**  
Prepared By: **D. T. Peterson / R. R. Honsinger**  
Estimate Type: **Planning/ROM**

#	Code	Description	Contractor	Resource	Qty	UOM	Labor Hours	Labor Hourly Rate	Equip Hours	Equipment Hourly Rate	Material Unit Cost	Subcontract Unit Cost	Other %	TOTAL COST
244		1.00 5M00-5M9B		U06-INL	11,000.00	Sq/Ft	330	\$35.93 \$11,857		\$0	\$0.23 \$2,541	\$0	49.41% \$7,114	\$21,512
		Nylon reinforced plastic tarps												
245		1.00 5M00-5M9B		U06-INL	600.00	LF	24	\$35.93 \$862		\$0	\$0.11 \$63	\$0	55.91% \$517	\$1,443
		Allowance For Sealing Tarps To Perimeter Of Basins												
246		1.00 5M00-5M9B		U12-INL	160.00	Hrs	160	\$32.32 \$5,171		\$0	\$0	\$0	60.00% \$3,103	\$8,274
		Equipment Operator to support installation & disassembly of enclosures.												
247		1.00 ICP			1.00	Project		\$0		\$0	\$1,575.00 \$1,575	\$0	\$0	\$1,575
		Allowance For Sealants, Fasteners, & Consumables												
248		1.00 ICP			2.00	EA		\$0		\$0	\$77,175.00 \$154,350	\$0	\$0	\$154,350
		Exhaust Fan, HEPA Filters & Inlet Filters												
249		1.00 5M00-5M9B		U47-INL	2.00	Places	80	\$35.93 \$2,874		\$0	\$0	\$0	60.00% \$1,725	\$4,599
		Labor To Install Fans & Filters												
250		1.00 5M00-5M9B		U47-INL	3.00	Locatio	240	\$35.93 \$8,623		\$0	\$262.50 \$788	\$0	54.98% \$5,174	\$14,585
		Enclosure Testing Memo: Assume basin enclosures will be tested to ensure negative pressures in enclosures.												
251		1.00 5M00-5M9B		U06-INL	1.00	Project	440	\$35.93 \$15,809		\$0	\$0	\$0	60.00% \$9,486	\$25,295
		Labor to disassemble enclosures & box materials for disposal												
252		1.00 ICP			2.00	EA		\$0		\$0	\$6,300.00 \$12,600	\$0	\$0	\$12,600
		Waste containers for contaminated material												
253		1.00 5M00-5M9B		U11-INL	3.00	Locatio	240	\$36.16 \$8,678		\$0	\$2,100.00 \$6,300	\$0	34.76% \$5,207	\$20,185
		Allowance For Temporary Lighting In Containments												
254		1.00 5M00-5M9B		U21-INL	520.00	Hrs	520	\$21.16 \$11,003		\$0	\$0	\$0	60.00% \$6,602	\$17,605
		Labor Support To Stock & Remove PPEs												

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# Detail Item Report

Project Name: **CPP-603 EE/ICA Alternatives**  
 Options 2, 3, 4, 5  
 Project Location: **INEEL / INTEC**  
 Estimate Number: **2731-B**

Client: **B. T. Richards**  
 Prepared By: **D. T. Peterson / R. R. Honsinger**  
 Estimate Type: **Planning/ROM**

#	Code	Description	Contractor	Resource	Qty	UOM	Labor Hrs	Labor Hourly Rate Cost	Equip Hours	Equipment Hourly Rate Cost	Material Unit Cost Cost	Subcontract Unit Cost Cost	Other % Cost	TOTAL COST
255		Allowance For PPEs	1.00 ICP		416.00	Changes		\$0		\$0	\$37.56 \$15,624	\$0	\$0	\$15,624
256		Allowance For PODs & Daily Safety Meetings	1.00 5M00-5M9B	U06-INL	832	Days		\$35.93 \$29,894		\$0	\$0	\$0	60.00% \$17,936	\$47,830
257		Labor for changes into/out of PPEs	1.00 5M00-5M9B	U06-INL	416	Changes		\$35.93 \$14,947		\$0	\$0	\$0	60.00% \$8,968	\$23,915
258		Craft Supervision / Subject Mater Expert @ 15% Of Labor Hrs	1.00 5M00-5M9B	Z11-INL	497	Hrs		\$43.60 \$21,687		\$0	\$0	\$0	60.00% \$13,012	\$34,699
259		U60-INL RAD TECH to Support Containment Erection/Removal 10% of Labor Hrs.	1.00 7600-7632	U60-INL	332	Hrs		\$38.39 \$12,730		\$0	\$0	\$0	65.00% \$8,275	\$21,005
262		Radiation Shielding			993			\$35,669		\$0	\$40,537	\$0	\$21,401	\$97,607
263		Shielding Plates (1/2" thk CS Plate)	1.00 ICP		55,152.00	Lbs		\$0		\$0	\$0.73 \$40,537	\$0	\$0	\$40,537
264		U55-INL WELDER	1.00 5M00-5M9B	U55-INL	993	Lbs		\$35.93 \$35,669		\$0	\$0	\$0	60.00% \$21,401	\$57,070
265		Basin Decontamination / Stabilization			0			\$0		\$0	\$0	\$448,365	\$0	\$448,365
Basis of Estimate: Costs are based on vendors quote 3/22/04.														
266		Divers to clean floors, wall & apply fixative	1.00 ICP		1.00	Project		\$0		\$0	\$0	\$448,365.00 \$448,365	\$0	\$448,365

Project Name: CPP-603 EE/ICA Alternatives  
Options 2, 3, 4, 5  
Project Location: INEEL / INTEC  
Estimate Number: 2731-B

### Detail Item Report

Client: B. T. Richards  
Prepared By: D. T. Peterson / R. R. Honsinger  
Estimate Type: Planning/ROM

#	Code	Description	Contractor	Resource	Qty	UOM	Labor Hours	Labor Hourly Rate Cost	Equip Hours	Equipment Hourly Rate Cost	Material Unit Cost Cost	Subcontract Unit Cost Cost	Other % Cost	TOTAL COST
267		Project Management & Support					8,292	\$431,516		\$0	\$0	\$0	\$50,143	\$481,659
268	E28	1.00 ICP		E28	1.00	Year	1,750	\$72.34 \$126,595		\$0	\$0	\$0	\$0	\$126,595
269	X12	1.00 ICP		X12	1.00	Year	1,750	\$48.62 \$85,085		\$0	\$0	\$0	\$0	\$85,085
270	U60-INL	1.00 7600-7632		U60-INL	1.00	Year	1,750	\$38.39 \$67,183		\$0	\$0	\$0	65.00% \$43,669	\$110,851
271	Z08	1.00 7600-7632		Z08-INL	1.00	Year	175	\$56.92 \$9,961		\$0	\$0	\$0	65.00% \$6,475	\$16,436
272	E19	1.00 ICP		E19	1.00	Year	875	\$58.42 \$51,118		\$0	\$0	\$0	\$0	\$51,118
273	S08	1.00 ICP		S08	1.00	Year	875	\$48.47 \$42,411		\$0	\$0	\$0	\$0	\$42,411
274	P44	1.00 ICP		P44	1.00	Year	437	\$46.21 \$20,194		\$0	\$0	\$0	\$0	\$20,194
275	F22	1.00 ICP		F22	1.00	Year	170	\$52.99 \$9,008		\$0	\$0	\$0	\$0	\$9,008
276	A14	1.00 ICP		A14	1.00	Year	350	\$23.05 \$8,068		\$0	\$0	\$0	\$0	\$8,068
277	P21	1.00 ICP		P21	1.00	Year	160	\$74.34 \$11,894		\$0	\$0	\$0	\$0	\$11,894

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Material Costs where applicable include Idaho State Sales Tax  
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# Detail Item Report

Project Name: CPP-603 EE/ICA Alternatives  
Options 2, 3, 4, 5  
Project Location: INEEL / INTEC  
Estimate Number: 2731-B

Client: B. T. Richards  
Prepared By: D. T. Peterson / R. R. Honsinger  
Estimate Type: Planning/ROM

#	Code	Description	Contractor	Resource	Qty	UOM	Labor Hours	Labor Hourly Rate	Equip Hours	Equipment Hourly Rate	Material Unit Cost	Subcontract Unit Cost	Other %	TOTAL COST
278		S&M Costs					12,800	\$470,080		\$0	\$0	\$81,000	\$280,414	\$831,494
279	U60-INL	1.00 7600-7632		U60-INL			3,200	\$38.39		\$0	\$0	\$0	65.00%	\$202,699
		RADIOLOGICAL CONTROL TECH ( Monitoring & surveillance )			20.00	Years		\$122,848						
280	T16-INL	1.00 7100-7350		T15-INL			3,200	\$32.22		\$0	\$0	\$0	65.00%	\$170,122
		INDUST SAFETY/HEALTH TECH ( Monitoring & surveillance )			20.00	Years		\$103,104						
281	F21-INL	1.00 5M00-5M9B		U29-INL			3,200	\$35.88		\$0	\$0	\$0	60.00%	\$183,706
		OTHER FACILITY SERVICES			20.00	Years		\$114,816						
282	F28-INL	1.00 P000-P230		F28-INL			3,200	\$40.41		\$0	\$0	\$0	50.00%	\$193,968
		SECURITY COORDINATORS			20.00	Years		\$129,312						
283		1.00 ICP						\$0		\$0	\$0	\$27,000.00	\$0	\$81,000
		Apply fixative to existing walls & floors at 6 yr. intervals			3.00	Events								
		Memo: Cost based on vendors quote, see job file quote 3/22/04.												

284		Earth Cap Over Building Foot Print			3,029			\$111,690		\$98,040	\$218,159	\$0	\$124,216	\$552,106
285		Purchase & Haul Low - Permeability Soil Layer			1,637			\$60,200		\$39,696	\$213,381	\$0	\$90,944	\$404,221

286		1.00 DIRT			6,774.00	CY		\$0		\$0	\$31.50	\$0	29.03%	\$275,326
		Purchase Low Permeability Soil									\$213,381		\$61,945	
		Memo: Assume soil will be imported from an off-Site source.												

287		1.00 DIRT		CN-EQMD	6,774.00	CY	41	\$36.78		\$677	\$0	\$0	29.03%	\$2,803
		Operator & Loader						\$1,495						

288		1.00 DIRT		CN-TRHV	6,774.00	CY	1,355	\$36.34		\$35,225	\$0	\$0	29.03%	\$108,976
		Teamster & Belly Dump						\$49,233						
		Memo: Assume 4 Hr. for round trip with 20 cubic yard belly dump.												

289		1.00 DIRT		CN-EQMD	6,774.00	CY	41	\$36.78		\$1,016	\$0	\$0	29.03%	\$3,240
		Operator & Water Wagon						\$1,495						

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# Detail Item Report

Project Name: CPP-603 EE/CA Alternatives  
Options 2, 3, 4, 5  
Project Location: INEEL / INTEC  
Estimate Number: 2731-B

Client: B. T. Richards  
Prepared By: D. T. Peterson / R. R. Honsinger  
Estimate Type: Planning/ROM

#	Code	Description	Contractor	Resource	Qty	UOM	Labor Hours	Labor Hourly Rate	Equip Hours	Equipment Hourly Rate	Material Unit Cost	Subcontract Unit Cost	Other %	TOTAL COST
293		1.00 DIRT		CN-EQMD	6,774.00	CY	41	\$36.78 \$1,495		\$1,761	\$0	\$0	29.03% \$945	\$4,201
		Operator & Motor Grader												
297		1.00 DIRT		CN-EQMD	6,774.00	CY	41	\$36.78 \$1,495		\$1,016	\$0	\$0	29.03% \$729	\$3,240
		Operator & Compactor												
292		1.00 DIRT		CN-SURR	40.00	Hrs.	40	\$34.68 \$1,387		\$0	\$0	\$0	29.03% \$403	\$1,790
		Grade Checker												
293		1.00 DIRT		CN-GEN	80.00	Hrs.	80	\$45.00 \$3,600		\$0	\$0	\$0	29.03% \$1,045	\$4,645
		Foreman & Pickup												

294 Vegetated Soil Layer Basis of Estimate: 1,391 \$51,490 \$58,345 \$4,778 \$0 \$33,272 \$147,885  
Assume this soil will be imported from an on-site source at no cost to the subcontractor or project.

295		1.00 DIRT		CN-EQMD	9,669.00	CY	58	\$36.78 \$2,134		\$967	\$0	\$0	29.03% \$900	\$4,001
		Operator & Loader												
296		1.00 DIRT		CN-TRHV	9,669.00	CY	967	\$36.34 \$35,137		\$50,279	\$0	\$0	29.03% \$24,796	\$110,212
		Teamster & Belly Dump Memo: Assume 2 Hr. for round trip with 20 cubic yard belly dump.												
297		1.00 DIRT		CN-EQMD	9,669.00	CY	58	\$36.78 \$2,134		\$1,450	\$0	\$0	29.03% \$1,040	\$4,625
		Operator & Water Wagon												
298		1.00 DIRT		CN-EQMD	9,669.00	CY	58	\$36.78 \$2,134		\$2,514	\$0	\$0	29.03% \$1,349	\$5,997
		Operator & Motor Grader												
299		1.00 DIRT		CN-EQMD	9,669.00	CY	58	\$36.78 \$2,134		\$1,450	\$0	\$0	29.03% \$1,040	\$4,625
		Operator & Compactor												
300		1.00 DIRT		CN-SURR	40.00	Hrs.	40	\$34.68 \$1,387		\$0	\$0	\$0	29.03% \$403	\$1,790
		Grade Checker												

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Material Costs where applicable include Idaho State Sales Tax  
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# Detail Item Report

Project Name: CPP-603 EE/ICA Alternatives  
Options 2, 3, 4, 5  
Project Location: INEEL / INTEC  
Estimate Number: 2731-B

Client: B. T. Richards  
Prepared By: D. T. Peterson / R. R. Honsinger  
Estimate Type: Planning/ROM

#	Code	Description	Contractor	Resource	Qty	UOM	Labor Hours	Labor Hourly Rate	Equip Hours	Equipment Hourly Rate	Material Unit Cost	Subcontract Unit Cost	Other % Cost	TOTAL COST
301		Allowance for seeding		CN-EQMD	175.00	M. S. F	53	\$36.78 \$1,931		\$935	\$27.30 \$4,778	\$0	29.03% \$2,219	\$9,862
302		Foreman & Pickup		CN-GEN	100.00	Hrs.	100	\$45.00 \$4,500		\$750	\$0	\$0	29.03% \$1,524	\$6,774
303		Remove & Dispose of Basin Cover & Shielding & Basin Fill					4,579	\$118,388	1,250	\$1,950	\$21,000	\$0	\$92,054	\$233,392
304		Remove & Dispose of Basin Cover & Shielding					2,221	\$46,996		\$0	\$0	\$0	\$49,219	\$96,215
305		Remove & Dispose of Basin Cover & Shielding Memo: Cost based on 40% of the labor to erect shielding and basin cover.		U21-INL	2,221.00	Hrs.	2,221	\$21.16 \$46,996		\$0	\$0	\$0	60.00% \$28,198	\$75,194
306		Dispose of contaminated barrier materials & PPEs		ICP	72.00	CM		\$0		\$0	\$0	\$0	100.00% \$19,656	\$19,656
307		Dispose of shielding		ICP	5.00	CM		\$0		\$0	\$0	\$0	100.00% \$1,365	\$1,365
308		Basin Fill Basis of Estimate:					2,358	\$71,392	1,250	\$1,950	\$21,000	\$0	\$42,835	\$137,176
Costs are based on 7997 cubic yards of fill being required to fill basins. Assume material will be loaded at an on Site location and that round trip form load area will be 1 hour. Assume material will be loaded on 12-yard end dumps at 15 minutes per load and will required 666 loads. Fill will be dumped at a location near CPP-603 and distributed via conveyors into the basins. Assume no compaction of fill material will be required.														
309	75626	1.00 ICP LOADER, FRONT END (Assume two loader required)		75626	400.00	Hrs		\$0	400	\$2.90 \$1,160	\$0	\$0	\$0	\$1,160
310	71792	1.00 ICP TRUCK - DUMP 12 BCUYD (Assume four trucks will be required)		71792	800.00	Hrs		\$0	800	\$0.94 \$752	\$0	\$0	\$0	\$752

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Material Costs where applicable include Idaho State Sales Tax  
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# Detail Item Report

Project Name: CPP-603 EE/CA Alternatives  
 Options 2, 3, 4, 5  
 Project Location: INEEL / INTEC  
 Estimate Number: 2731-B

Client: B. T. Richards  
 Prepared By: D. T. Peterson / R. R. Honsinger  
 Estimate Type: Planning/ROM

#	Code	Description	Contractor	Resource	Qty	UOM	Labor Hours	Labor Hourly Rate	Equip Hours	Equipment Hourly Rate	Material Unit Cost	Subcontract Unit Cost	Other %	TOTAL COST
311	U12-INL	1.00 5M00-5M9B		U12-INL	1,200.00	Hrs	1,200	\$32.32 \$38,784		\$0	\$0	\$0	60.00%	\$62,054
		EQUIPMENT OPERATOR (Assume six equipment operators will be required)												
312	U21-INL	1.00 5M00-5M9B		U21-INL	800.00	Hrs	800	\$21.16 \$16,928		\$0	\$0	\$0	60.00%	\$27,085
		LABORER (Assume four labors will be required)												
313		1.00 ICP			1.00	Project		\$0		\$0	\$21,000.00 \$21,000	\$0	\$0	\$21,000
		Allowance for purchase of special equipment/conveyers to distribute basin fill												
314	U12	1.00 5M00-5M9B		U12	5.00	Wks.	50	\$45.46 \$2,273		\$0	\$0	\$0	60.00%	\$3,636
		Lube Truck Mechanic/Operator												
315	71797	1.00 ICP		71797	50.00	Hrs	50	\$0		\$0.75 \$38	\$0	\$0	\$0	\$38
		TRUCK - LUBE (*FLEET POOL)												
316	Z11-INL	1.00 5M00-5M9B		Z11-INL	2,050.00	Hrs	308	\$43.60 \$13,407		\$0	\$0	\$0	60.00%	\$21,451
		FOREMAN, CRAFTS @ 15% of labor hours												